Case 3046

Papilio sylvanus Esper, [1779] (currently known as Ochlodes venata or Augiades sylvanus; Insecta, Lepidoptera): proposed conservation of the specific name

A.L. Devyatkin

Department of Entomology, Faculty of Biology, Moscow State University, 119899 Moscow, Russia

Abstract. The purpose of this application is to conserve the specific name of *Papilio sylvanus* Esper, [1779] (currently known as *Ochlodes venata* or *Augiades sylvanus*) for the Large Skipper (family HESPERIIDAE), one of the commonest butterflies in Europe and widely distributed throughout the Palaearctic. The species was known exclusively as *sylvanus* for more than 150 years, mostly in the combination *Augiades sylvanus*. The name is formally a junior primary homonym of *Papilio sylvanus* Drury, 1773, in use for the past 150 years as *Anthene sylvanus* for a West African hairtail butterfly (family LYCAENIDAE). The two species have not been considered congeneric since *Papilio* was used for all butterflies in the 18th century. The name *Ochlodes venata* (Bremer & Grey, 1853) has been used for *P. sylvanus* Esper in recent decades but this relates to a separate species from China.

Keywords. Nomenclature; taxonomy; Lepidoptera; butterflies; HESPERIIDAE; LYCAENIDAE; skippers; hairtails; Augiades sylvanus; Ochlodes sylvanus; Ochlodes venata; Anthene sylvanus.

- 1. Drury (1773, p. 5, pl. 3, figs. 2 and 3) described and figured *Papilio sylvanus*, a hairtail butterfly from Sierra Leone (family LYCAENIDAE). The species was one of those included in his new genus *Anthene* by Doubleday (1847, p. 27) and it has been known as *Anthene sylvanus* since then (see, for example, the recent publications of Stempffer, 1967, p. 194; D'Abrera, 1980, p. 528, pl. 528; Berger, 1981, p. 299, pl. 207, figs. 32–35; Kielland, 1990, p. 207, pl. 53; and Ackery, Smith & Vane-Wright, 1995, p. 627). The species is distributed in forests from Senegal and Sierra Leone to Zaire and east to Uganda and western Tanzania. The usage of *sylvanus* Drury has never been challenged.
- 2. Papilio sylvanus Esper, [1779] (p. 343, pl. 36, suppl. 12, fig. 1) was described from Germany (see Heppner, 1981, for the dates of publication of the parts of Esper's work). The specific name sylvanus was used for more than 150 years for one of the more common butterflies, known in English as the Large Skipper (family HESPERIIDAE), which is found throughout the Palaearctic region, from western Europe to the easternmost limits of Asia (see, for example, Staudinger, 1871, p. 35; Mabille in Seitz, [1906], p. 347, pl. 88a; and Frohawk, [1924], p. 182, pl. 58).
- 3. Until the late 18th century all butterflies were classed in *Papilio*; this followed the usage of Linnaeus (1758, p. 458) who, however, divided *Papilio* into several 'phalanges'. Skippers, including *P. sylvanus* Esper, were placed in *Hesperia* by

Fabricius (1793, pp. 258, 326) and in the family HESPERIIDAE by Latreille (1809, pp. 189, 207); this was raised to a superfamily HESPERIOIDEA by Comstock & Comstock (1904), and skippers are in many ways distinct from all other butterflies. Species such as *P. sylvanus* Drury were placed in the family LYCAENIDAE by Leach (1814, p. 135). The names *sylvanus* Drury and *sylvanus* Esper relate to totally different taxa which have not been considered congeneric for 200 years, or confamilial since the early 19th century; there has never been any confusion between them.

- 4. Hemming (1934a, p. 39) noticed that *Papilio sylvanus* Esper, [1779] was a junior primary homonym of *P. sylvanus* Drury, 1773, and stated that the oldest available name for the species was *Hesperia venata* Bremer & Grey, 1853 (p. 61), which was based on a Chinese taxon. At the same time *H. venata* was placed in the genus *Ochlodes* Scudder, 1872; the previous usage of *Augiades* Hübner, [1819] was based on an incorrect type species designation (see Hemming, 1934b, p. 160). Hemming (1934c, p. 99) proposed the replacement subspecific name *alexandra* for the principal European subspecies *sylvanus sylvanus*, whilst Verity (1934, p. 13) proposed the name *esperi*. In the same year Hemming (1934d, p. 200) cited his combination *O. venata alexandra* but otherwise neither Hemming's nor Verity's replacement names for *sylvanus* Esper has ever been used.
- 5. In 1949 Evans (pp. 350–352) revised the taxonomy of the species *Ochlodes venata* and established the following subspecific divisions and synonymies:
 - O. venata venata (Bremer & Grey, 1853)
 - O. venata hyrcana (Christoph, 1893)
 - O. venata similis (Leech, 1893)
 - O. venata sagitta Hemming, 1934 [a replacement name for O. venata sylvanoides (Leech, 1893), a junior secondary homonym in Ochlodes of Hesperia sylvanoides Boisduval, 1832]
 - O. venata faunus (Turati, 1905)
 - = sylvanus Esper, [1779]
 - = alexandra Hemming, 1934
 - = esperi Verity, 1934.

The subspecies hyrcana, similis and famus were reported to have slight differences in the characters of their genitalia from the others. Since Evans's (1949) work the European taxon has been known as Ochlodes venata famus (Turati, 1905) (see, for example, Higgins & Riley, 1983, p. 339; Bridges, 1988, part 1, p. 196, part 2, p. 38) although the name Augiades sylvanus (Esper) has also appeared in many guides and lists (see, for example, Bergmann, 1952, p. 468, pl. 62; Döring, 1955, p. 65; Pulkkinen, 1956, p. 44, pl. 18; Tuleshkov, 1958, p. 99; Alberti, 1965, p. 658; Alberti, 1969, p. 144; Koch, 1984, p. 168, pl. 13). There are also numerous regional faunal lists in the former USSR using the name sylvanus.

6. I am at present in the course of a revision of the *Ochlodes venata* group. It is clear that the name *Ochlodes venata* as used by Evans (1949) represents a complex of species of which two, the trans-Palaearctic *Ochlodes sylvanus* (Esper) and east Asiatic *O. venata* (Bremer & Grey), are sympatric in the Far East. The differences in phenotype and genitalia are constant and thus Evans's (1949) taxonomic, and hence nomenclatural, arrangement cannot be maintained.

- 7. Ochlodes sylvanoides (Leech, 1893, p. 604, pl. 41, fig. 4; = sagitta Hemming, 1934b, p. 199) was described from Ta-Tsien-lu in southwest China. A study of the type material of this taxon in the Natural History Museum, London, shows that it is definitely distinct from, although related to, O. venata. Three other subspecific names putatively available for use for the European (and trans Palaearctic) species are also more than likely to represent distinct taxa. O. hyrcana (Christoph, 1893, p. 87) is almost entirely confined to northern Iran and is strongly suspected to be a separate species as no transitions to O. sylvanus, found in neighbouring localities, are known (see Alberti, 1974, pp. 82-83 and Häuser, 1982). O. similis (Leech, 1893, p. 605, pl. 41, fig. 6) was described from Mou-Pin in southwest China and is almost, if not fully, sympatric with O. sagitta; its type is quite different from both the latter and O. sylvanus, suggesting another separate species. Examination of the original description and photograph of the type of O. faunus (Turati, 1905, p. 36, pl. 6, figs. 5-9, pl. 7, fig. 3), described from Gavarnie in the east Pyrenees, shows that it might well be a different taxon from O. sylvanus. The type of O. faunus has unfortunately been entirely destroyed by pests and thus cannot be checked (see Nekrutenko, 1993).
- 8. The use of the specific name of Ochlodes venata (Bremer & Grey, 1853), which represents a distinct east Asian species, is taxonomically no longer appropriate for the trans-Palaearctic Large Skipper butterfly (para. 6 above). Adoption for the latter of any one of the names which has been used for a subspecies of O. venata (para, 5) would lead to confusion (the species has never been known by such a name) and instability (the nominal taxon may prove to be a separate species; see para. 7). Final clarification of the taxonomic status of the nominal subspecies is a long-term project which requires considerable amounts of material from inaccessible localities. Neither of the replacement names proposed by Hemming (1934) and Verity (1934) has ever been adopted in the literature. The specific name sylvanus Esper, [1779] was in universal usage without ambiguity until 1934 (a period of more than 150 years) and has continued to be used by some authors. It represents a well-known and widespread taxon. As mentioned in para. 3 above, Papilio sylvanus Drury and P. sylvanus Esper are placed in different families, indeed superfamilies, and have been for very many years. To introduce a yet further name (such as alexandra Hemming or esperi Verity) for the Palaearctic species would cause unnecessary confusion and would render a disservice to all those with an interest in butterflies; such a nomenclatural change would affect those working in applied fields (ecology and conservation, for example) as well as taxonomists. I therefore propose that the specific name of Ochlodes sylvanus (Esper, [1779]) be conserved.
- 9. The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to rule that the specific name *sylvanus* Esper, [1779], as published in the binomen *Papilio sylvanus*, is not invalid by reason of being a junior primary homonym of *Papilio sylvanus* Drury, 1773;
 - (2) to place on the Official List of Specific Names in Zoology the following names:
 - (a) sylvanus Drury, 1773, as published in the binomen Papilio sylvanus;
 - (b) sylvanus Esper, [1779], as published in the binomen *Papilio sylvanus*, ruled in (1) above to be not invalid by reason of being a junior primary homonym of *Papilio sylvanus* Drury, 1773.

References

- Ackery, P., Smith, C.R. & Vane-Wright, R.I. 1995. Carcosson's African butterflies. 803 pp. CS1RO, Australia.
- Alberti, B. 1965. Ergebnisse der Albanien-Expedition 1961 des Deutschen Entomologischen Institutes. 34. Beitrag. Lepidoptera: Hesperiidae. Beiträge zur Entomologie, 15(5-6): 649-660.
- Alberti, B. 1969. Zur Kenntnis der Hesperiiden-Fauna des Kaukasus-Raumes und Armeniens (Lepidoptera, Hesperiidae). Faunistische Abhandlungen Staatlichen Museum für Tierkunde in Dresden, 2(20): 129–147.
- Alberti, B. 1974. Ergebnisse der tschechoslowakisch-iranischen entomologischen Expedition nach dem Iran 1970 (mit Angaben über einige Sammelresultate in Anatolien). No. 5: Lepidoptera: Hesperiidae, Syntomidae, Zygaenidae. *Acta Entomologica Musei Nationalis Prague*, Supplement 6: 79–85.
- Berger, L.A. 1981. Les papillons de Zaïre. 323 pp., 213 pls., index. La Présidence de la République du Zaïre, Kinshasa.
- Bergmann, A. 1952. Die Grossschmetterlinge Mitteldeutschlands, Bd. 2. 495 pp. Urania, Leipzig.
- Bremer, O. & Grey, W. 1853. Diagnoses de lepidoptères nouveaux trouvés par MM. Tatarinoff et Gaschkewitsch aux environs de Pekin. Pp. 58-67 in Motschulsky, V. de, Études entomologiques, vol. 1. Helsingfors & Dresde.
- Bridges, C.A. 1988. Catalogue of Hesperiidae (Lepidoptera: Rhopalocera), parts I and 2. Urbana.
- Christoph, H. 1893. Lepidoptera nova faunae palaearcticae. Iris, 6: 86-96.
- D'Abrera, B. 1980. Butterflies of the Afrotropical Region. 593 pp. Landsdowne Press, Melbourne.
- Döring, E. 1955. Zur Morphologie der Schmetterlingseier. 154 pp., 61 pls. Akademie-Verlag, Berlin.
- Drury, D. 1773. Illustrations of natural history; wherein are exhibited ... figures of exotic insects, vol. 2. vii, 90 pp., 50 pls., index. Author, London.
- Esper, E.J.C. [1779]. Die Schmetterlinge in Abbildungen nach der Natur mit Beschreibungen, Theil 1 (Europäische Gattungen). Walther, Erlangen.
- Evans, W.H. 1949. A catalogue of the Hesperiidae from Europe, Asia and Australia in the British Museum (Natural History). 502 pp., 53 pls. British Museum (Natural History), London.
- Fabricius, J.C. 1793. Entomologia systematica emendata et aucta, vol. 3, part 1. 487 pp.
 Frohawk, F.W. [1924]. Natural history of British butterflies, vol. 2. 206 pp., 64 pls. Hutchinson, London.
- Häuser, Ch. 1982. Zur Verbreitung, Biologie und Taxonomie von Ochlodes hyrcanus (Christoph, 1893) (Hesperiidae). Nota Lepidopterologica, 5(2-3): 86–102.
- Hemming, F. 1934a. The generic names of British insects, part 2 (The generic names of the British Rhopalocera with a checklist of the species). Pp. 9-40. Royal Entomological Society of London, London.
- Hemming, F. 1934b. *The generic names of the Holarctic butterflies*, vol. 1 (1758–1863). viii, 184 pp. British Museum (Natural History), London.
- Hemming, F, 1934c. Some notes on the nomenclature of Palaearctic and African Rhopalocera. *Stylops*, 3(5): 97–99.
- Hemming, F. 1934d. Revisional notes on certain species of Rhopalocera (Lepidoptera). Stylops, 3(9): 193–200.
- Heppner, J.B. 1981. The dates of E.J.C. Esper's Die Schnietterlinge in Abbildungen ... 1776 [1830], Archives of Natural History, 10(2): 251–254.
- Higgins, L.G. & Riley, N.D. 1983. A field guide to the butterflies of Britain and Europe, Ed. 5. 384 pp., 63 pls. Collins, London.
- Kielland, J. 1990. Butterflies of Tanzania. 363 pp., 68 pls. Hill House, Melbourne & London. Koch, M. 1984. Wir bestimmen Schmetterlinge, Bd. 1 (Tagfalter). 172 pp., 16 pls. Neumann, Leipzig. (Also in previous editions).
- Latreille, P.A. 1809. Genera crustaceorum et insectorum ..., vol. 4. 399 pp.

Leach, W.E. 1814. The zoological miscellany; being descriptions of new, or interesting animals [illustrations by R.P. Nodder], vol. 1. 144 pp., 60 pls. Nodder, London.

Leech, J.H. 1893. Butterflies from China, Japan, and Corea, vol. 2 (Lycaenidae, Papilionidae and Hesperiidae), part 5. Author, London.

Mabille, P. [1906]. Augiades. Pp. 347–348 in Scitz, A., Die Grossschmetterlinge des Palaearktischen Faunengebietes, Abt. 1, Band 1 (Die Palaearktischen Tagfalter).

Nekrutenko, Yu. 1993. An annotated catalogue of butterflies and skippers (Lepidoptera: Hesperioidea, Papilionoidea) named by Emilio Turati. *Bollettino Museo Regionale di Scienze Naturali, Torino*, 11(1): 121–135.

Pulkkinen, A. 1956, Perhoskirja, 84 pp., 40 pls. Porvoo, Helsinki, [In Finnish].

Staudinger, O. 1871. Macrolepidoptera. In Staudinger, O. & Wocke, M., Catalog der Lepidopteren des Europaischen Faunengebietes. 406 pp.

Stempffer, H. 1967. The genera of the African Lycaenidae (Lepidoptera: Rhopalocera). Bulletin of the British Museum (Natural History), Entomology, Supplement 10: 1–322.

Tuleshkov, K. 1958. [Lepidoptera in Bulgaria]. 343 pp. Sofia. [In Bulgarian].

Turati, E. 1905. Alcune nuove forme di Lepidotteri. *Naturalista Siciliano*, 18(2–3): 25–48.

Verity, R. 1934. The lowland races of butterflies in the Upper Rhone Valley. Entomologist's Record and Journal of Variation, 46 (Supplement): 1–40.